Paper No. 21

# UNITED STATES PATENT AND TRADEMARK OFFICE

# BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KATSUYOSHI HARADA

Appeal No. 2004-1223 Application No. 09/842,142

ON BRIEF

Before COHEN, ABRAMS, and NASE, <u>Administrative Patent Judges</u>. NASE, <u>Administrative Patent Judge</u>.

#### **DECISION ON APPEAL**

This is a decision on appeal from the examiner's final rejection of claims 1 and 2, which are all of the claims pending in this application.

We REVERSE.

#### **BACKGROUND**

The appellant's invention relates to a remote control running toy which is operated by a remote controller (specification, p. 1). A copy of dependent claim 2 is set forth in the appendix to the appellant's brief. Claim 1 reads as follows:

A remote control running toy, comprising:

a suspended chassis for supporting a car body thereon,

a rear-wheel driving mechanism for running the chassis by driving a pair of right and left rear wheels fitted respectively at the right and left rear sides of the chassis:

a pair of uprights, each having a kingpin for steerably supporting a pair of right and left front wheels which are fitted respectively at the right and left front sides of the chassis; and

a steering mechanism coupled through steering rods with the uprights;

wherein the running toy further comprises a shock absorber for absorbing a shock transmitted through the steering rods and wherein the shock absorber is a coil spring member formed by winding up a part of the steering rods in a coil form.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Suto	5,338,246	Aug. 16, 1994
Liebert	5,383,675	Jan. 24, 1995

Claims 1 and 2 stand rejected under 35 U.S.C. § 103 as being unpatentable over Suto in view of Liebert.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the answer (Paper No. 16, mailed September 26, 2003) for the examiner's complete reasoning in support of the rejection, and to the brief (Paper No. 14, filed July 28, 2003) and reply brief (Paper No. 17, filed October 28, 2003) for the appellant's arguments thereagainst.

#### **OPINION**

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by the appellant and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a <u>prima facie</u> case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 1 and 2 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a <u>prima facie</u> case of obviousness. <u>See In re Rijckaert</u>, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A <u>prima facie</u> case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention.

<u>See In re Fine</u>, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and <u>In re Lintner</u>, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

## The teachings of Suto

Suto's invention relates to vehicle toys and their suspension systems, particularly the suspension of steerable road wheels. One object of Suto's invention was to provide a vehicle toy with a wheel suspension system which can function independently on either side of the vehicle toy, produce no or very little inclination of the wheel when the vehicle toy moves up and down, and is fairly simple in construction.

As shown in Figures 1 and 6, the vehicle toy truck 30 is provided with an upper body 32 forming a top side of the vehicle body and molded of plastics or the like, and a lower body forming a chassis 34 supporting the upper body 32 disposed thereon, the chassis 34 forming a bottom side of the vehicle body. Provided in the interior of the vehicle toy are a printed circuit board having a receiver circuit for the radio control, and a battery as an electric power source supplying an electric current to the receiver circuit and a motor of the vehicle toy. A drive unit 38 is mounted at the rear of the chassis 34, the drive unit 38 being provided with a drive motor and a transmission mechanism. Right and left front steerable wheels 40b, 40a are connected to the front of the chassis 34 through a suspension system 42 which operates independently on opposite sides of

the vehicle toy. Left and right rear wheels 44a, 44b are mounted on opposite ends of a drive axle of the drive unit 38.

The suspension system 42 is provided with mechanisms which operate independently of each other on opposite sides of the vehicle toy, each mechanism connects the left or the right front wheel 40a, 40b to the body 34. Each front wheel 40a, 40b is rotatably mounted on a wheel axle 52 which is fixedly mounted on an upright member 50 which is rotatably supported by an upright holder 54. The upright member 50 is inserted inside a mounting portion 54a of the upright holder 54, which portion 54a forms a channel-like shape in section. The upright member 50 is rotatably mounted on a king pin 56 provided through such inserted portion. This king pin 56 is disposed inside (toward the vehicle body) a center line A of each of the left and right front wheels 40a, 40b; the king pin is lined up with a line (i.e. a king pin axis B) which at its upper end is slightly inclined to a center of the vehicle body; and, the king pin penetrates the mounting portion 54a of the upright holder 54, the upright member 50, and a through-hole 52d of the inner end of the wheel axle 52. The king pin axis B intersects with the ground surface at a point B'. A lower end portion of the upright member 50 is connected to an outer end of a steering rod 58.

#### The teachings of Liebert

Liebert's invention relates to the design and use of muscle powered mechanisms useful for land, water and air vehicles of foot pedal and hand lever design. The mechanism can utilize either arm or leg muscles or preferably, both arms and legs extending and retracting in a manner similar to walking or running as performed from a semi-recumbent position. Steering or other critical control is accomplished through another mechanism which is guided by the appropriate movement of the operator's head. The operator's feet are placed on pedals which are attached to swinging members which pivot in a bearing at the upper end. The operator's hands grasp leverage arms which are cantilevered, the distal ends of which are attached to the same push-pull connecting rods as the above mentioned swinging members with foot pedals attached.

As shown in Figures 5 and 7, steering of a velocipede is accomplished by the appropriate movement of the operator's head or head and upper torso. The appropriate movement necessary for a left turn, shown in Figure 5, can be accomplished by the operator's head or head and upper torso moving a steering lever 37 attached to the operator's helmet to the left. The steering lever 37 is adjustably mounted within and then pinned or bolted to a vertical steering rod 38. The turning motion of the steering lever 37 is communicated to an inverted "T" 39 affixed at the

bottom end of the vertical steering rod 38. The steering rod 38 pivots within a bearing 40 which is mounted on the frame 1 of the velocipede. In a neutral steering position one side of the inverted "T" 39 points directly left while the other side points directly right. At equidistant points from the center or pivoting point on the horizontal portion of the inverted "T" 39, a steering spring 41a and 42a and cable 41 and 42 are mounted. In a left turn the left steering spring 41a and cable 41 are pulled rearward while the right steering spring 42a and cable 42 are allowed to move forward. The opposite end of each steering spring 41a and 42a and cable 41 and 42 is attached under tension to a piece of linkage which is described as a forward inverted "T" 43 and pitman arm 44 which also pivots on a vertically oriented axis and is bearing mounted on the frame 1. In response to the left steering spring 41a and cable 41 moving rearward and the right steering spring 42a and cable 42 moving forward, the left side of the forward inverted "T" 43 moves rearward and the right side forward. The rearwardly extending pitman arm 44 which is affixed to the center of the forward inverted "T" rotates to the right, or counterclockwise. Pivotally attached to the pitman arm 44 are a left tie rod 45 and a right tie rod 46. As the pitman arm 44 rotates to the right it pulls the left tie rod 45 and pushes the right tie rod 46. The left tie rod 45 pivotally communicates with a left steering knuckle 5 through the left tie rod end 47 and the right tie rod 46 pivotally communicates with a right steering knuckle 6 through the right tie rod end 48. The steering movement initiated at the steering lever 37 is communicated to the steering

knuckles producing a left turn while the vehicle is moving in a forward direction. A turn to the right is accomplished by the steering components moving in the opposite direction as shown in Figure 7. Liebert teaches (column 7, lines 40-44) that "[t]he use of a spring 41 and 42a 41a and 42a in each steering cable 41 and 42 was implemented to absorb shock in the event one of the front wheels hit a hole or an obstacle and thereby lessen the potential for injury to the operator."

#### **Ascertainment of Differences**

After the scope and content of the prior art are determined, the differences between the prior art and the claims at issue are to be ascertained. <u>Graham v. John Deere Co.</u>, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966).

Based on our analysis and review of Suto and claim 1, it is our opinion that one difference is the limitation that "the running toy further comprises a shock absorber for absorbing a shock transmitted through the steering rods and wherein the shock absorber is a coil spring member formed by winding up a part of the steering rods in a coil form."

#### **Obviousness Determination**

With regard to this difference, the examiner determined (answer, p. 4) that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Suto "to include the shock absorber being used for absorbing a shock transmitted through steering rods having the shock absorber being a coil spring member formed by winding up a part of the steering rods in a coil form, and the steering rods are made of metal wire as taught by Liebert. To do so would be able to have a smooth travel with a decreased in road vibration."

The appellant argues throughout both briefs that there is no motivation in the applied prior art to have modified Suto to arrive at the claimed subject matter. We agree.

A critical step in analyzing the patentability of claims pursuant to 35 U.S.C. § 103 is casting the mind back to the time of invention, to consider the thinking of one of ordinary skill in the art, guided only by the prior art references and the then-accepted wisdom in the field. See In re Dembiczak, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). Close adherence to this methodology is especially important in cases where the very ease with which the invention can be understood may prompt one "to fall victim to the insidious effect of a hindsight syndrome wherein that which only the

invention taught is used against its teacher." <u>Id.</u> (quoting <u>W.L. Gore & Assocs., Inc. v. Garlock, Inc.</u>, 721 F.2d 1540, 1553, 220 USPQ 303, 313 (Fed. Cir. 1983)).

Most if not all inventions arise from a combination of old elements. See In re
Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457 (Fed. Cir. 1998). Thus, every
element of a claimed invention may often be found in the prior art. See id. However,
identification in the prior art of each individual part claimed is insufficient to defeat
patentability of the whole claimed invention. See id. Rather, to establish obviousness
based on a combination of the elements disclosed in the prior art, there must be some
motivation, suggestion or teaching of the desirability of making the specific combination
that was made by the appellant. See In re Dance, 160 F.3d 1339, 1343, 48 USPQ2d
1635, 1637 (Fed. Cir. 1998); In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127
(Fed. Cir. 1984).

The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved. See Dembiczak, 175 F.3d at 999, 50 USPQ2d at 1617. In addition, the teaching, motivation or suggestion may be implicit from the prior art as a whole, rather than expressly stated in the references. See WMS Gaming, Inc. v. International Game Tech., 184 F.3d 1339, 1355, 51 USPQ2d 1385, 1397 (Fed. Cir.

1999). The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981) (and cases cited therein).

In our view, due to the disparate nature of the vehicles disclosed by Suto and Liebert, the combined teachings of Suto and Liebert would not have suggested any modification to Suto's steering rod 58. As such, the subject matter of claim 1 would not have been obvious at the time the invention was made to a person of ordinary skill in the art from the combined teachings of Suto and Liebert. The only possible suggestion for modifying Suto in the manner proposed by the examiner to meet the above-noted limitation stems from hindsight knowledge derived from the appellant's own disclosure. The use of such hindsight knowledge to support an obviousness rejection under 35 U.S.C. § 103 is, of course, impermissible.

For the reasons set forth above, the decision of the examiner to reject claim 1, and claim 2 dependent thereon, under 35 U.S.C. § 103 is reversed.

# **CONCLUSION**

To summarize, the decision of the examiner to reject claims 1 and 2 under 35 U.S.C. § 103 is reversed.

## **REVERSED**

IRWIN CHARLES COHEN Administrative Patent Judge	) ) )
NEAL E. ABRAMS Administrative Patent Judge	) ) BOARD OF PATENT ) APPEALS ) AND ) INTERFERENCES )
JEFFREY V. NASE Administrative Patent Judge	) ) )

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